

Work Order ID 155820***155820***

Page 1

Wednesday, January 18, 2017 7:40:16 AM

Item ID: D3552-23 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Door Prop
Start Date: 1/19/2017 Start Qty: 8.00 ***8*** Cust Item ID:
Required Date: 1/26/2017 Req'd Qty: 8.00 ***8*** Customer:
Reference:

Approvals: Process Plan: **DAS 21 9-89** Date: JAN 23 2017 Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3552	L								
100	PURCHASING	0.00							DAS 13 9-89 FEB 22 2017
100									
Purchasing	Memo	0.00							
Purchasing	Issue P/O: 35077								
	Purchase Part Number: B6-190-475-070N								
	Supplier: LS Technologies								
	Certificate of conformity is required								
110	Receive & Inspect for Damage & Mat'l Certs	0.00							DAS 6 9-89 FEB 01 2017
110									
Packaging	Memo	0.03							
Packaging	Ensure certificate of conformity is attached								
120	QC6- Inspect dimensions to drawing	0.00							DAS 38 9-89 FEB 17 2017
120									
QC	Memo	0.00							
Quality Control	Test for correct pressure								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Work Order ID 155820

Wednesday, January 18, 2017 7:40:16 AM

155820

Page 2

Item ID: D3552-23

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Door Prop

Start Date: 1/19/2017 Start Qty: 8.00

8

Cust Item ID:

Required Date: 1/26/2017 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Identify as per dwg & Stock Location: St 301

0.00

130

Packaging

Memo

0.01

Packaging

8 FEB 21 2017DAS
6
9-89

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.13

Quality Control

17/2/22 

mf

17-2-21

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

Picklist Print

Tuesday, January 17, 2017 1:20:36 PM

Page 1

Work Order ID: 155820

155820

Parent Item: D3552-23

D3552-23

Parent Item Name: Door Prop

Start Date: 1/19/2017

Required Date: 1/26/2017

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP Rev:A 11.04.07 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
B6-190-475-070N		Purchased		No			Each	0.0000		8			

B6-190-475-070N

Door Prop

**

FEB 01 2017

DAS
6
9-89

DQA: _____ Date: _____



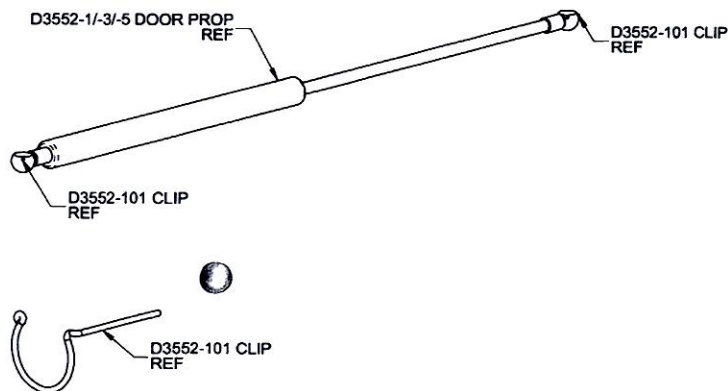
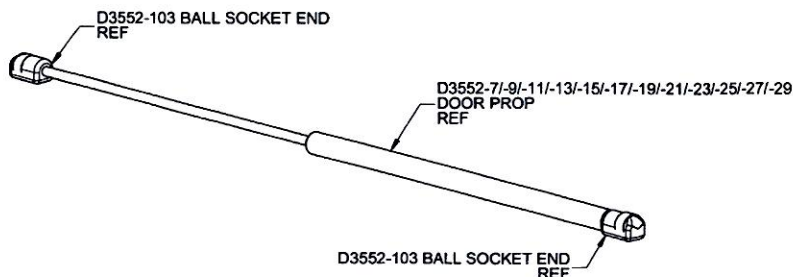
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
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Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

SPECIFICATION CONTROL DRAWING



3 SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 155820 M.C.5
1701-23

RELEASED
2015-08-04
ECN 15-609

L	ADD P/N D3552-29	VS	15.04.13
K	ADD "X" TO LS TECHNOLOGIES P/N'S TO DESIGNATE "EXTRA DAMPING" FOR D3552-15/-17/-19/-25/-27. REASON: PART2-209.	MB	12.07.16
J	ADD P/N D3552-25/-27. REMOVE ALTERNATE PART NUMBER FOR -15, -17 AND -19. STROKE FOR -15, -17 AND -19 WAS 139/6.06 NOW 154/6.06. EXTENDED LENGTH FOR -15, -17 AND -19 WAS 388/15.2 NOW 387/15.2.	AP	11.12.07
I	ADD P/N D3552-23	RF	11.10.11
H	ADD P/N D3552-21	DC	11.03.10
G	FOR -15, FORCE:300/67.4 WAS 400/89.9, SUPPLIER P/N B8-154-387-300N WAS B8-154-387-400N; FOR -17, STROKE: 139/6.47 WAS 160/6.30, EXT LG: 388/15.2 WAS 407/16.0, SUPPLIER P/N B8-154-387-156N WAS B8-167-408-156N	JPH	10.11.01
F	ADD P/N D3552-15/-17/-19 AND ALTERNATE SUPPLIER	JPH	10.07.27
E	ADD P/N D3552-13 ZN B8-1, A8-1, D6-1, CHANGE NAME FROM "GAS SPRING" TO "DOOR PROP" THROUGH OUT DWG	HS	10.02.03
D	ADD P/N D3552-101 ZN D6-1, C7-1, C1-1 AND D3552-103 ZN D1-1 AND C2-1 AND ZN B8-1; ADD NOTE REGARDING D3552-101 AND D3552-103 COMPATIBILITY ZN A8-1	HS	09.04.02
C	ADD D3552-11 AND CONVERSIONS FOR INSPECTION; UPDATE P/N FOR D3552-7	LE	07.06.01
B	ADD D3552-7/-9; UPDATE DESC. D3552-1/-3/-5	LE	06.10.24
A	NEW ISSUE	LE	06.09.15
REV.	DESCRIPTION	BY	DATE
DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	VS		
CHECKED	AK	DRAWING NO.	REV. L
MFG. APPR.	DD	D3552	SHEET 1 OF 2
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	DOOR PROP	NTS
DATE	15.04.13	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

APPROVED



DART PART NUMBER	DESCRIPTION	STROKE (mm/in)	EXTENDED LENGTH (mm/in)	FORCE (N/lb)	END FITTING	MATERIAL	SUPPLIER	SUPPLIER PART NUMBER OR MODEL NUMBER
D3552-1	DOOR PROP	220/8.66	530/20.6	70/15.7	10mm SS BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	C8-220-530-070N
D3552-3	DOOR PROP	200/7.87	490/19.3	200/45.0	10mm SS BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	C8-200-490-200N
D3552-5	DOOR PROP	175/6.89	430/16.9	150/33.7	10mm SS BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	C8-175-430-150N
D3552-7	DOOR PROP	220/8.66	530/20.9	70/15.7	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-220-530-070N
D3552-9	DOOR PROP	200/7.87	490/19.3	200/45.0	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-200-490-200N
D3552-11	DOOR PROP	240/9.45	575/22.6	150/33.7	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-240-575-150N
D3552-13	DOOR PROP	220/8.66	530/20.9	140/31.5	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B6-220-530-140N
D3552-15	DOOR PROP W/EXTRA DAMPING	154/6.06	387/15.2	300/67.4	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-154-387-300NX
D3552-17	DOOR PROP W/EXTRA DAMPING	154/6.06	387/15.2	156/35.1	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-154-387-156NX
D3552-19	DOOR PROP W/EXTRA DAMPING	154/6.06	387/15.2	60/13.5	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-154-387-060NX
D3552-21	DOOR PROP	167/6.57	410/16.1	70/15.7	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B6-167-410-070N
D3552-23	DOOR PROP	190/7.48	475/18.7	70/15.7	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B6-190-475-070N
D3552-25	DOOR PROP W/EXTRA DAMPING	148/5.83	475/18.7	300/67.4	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-148-475-300NX
D3552-27	DOOR PROP W/EXTRA DAMPING	148/5.83	475/18.7	156/35.1	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-148-475-156NX
D3552-29	DOOR PROP	190/7.48	475/18.7	100/22.5	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B6-190-475-100N
D3552-101	CLIP	N/A	N/A	N/A	N/A	CARBON STEEL	LS TECHNOLOGIES	C9
D3552-103	BALL SOCKET END	N/A	N/A	N/A	N/A	NYLON	LS TECHNOLOGIES	B10

D3552-X DOOR PROP

RELEASED
2015-08-04

NOTES:

- 1) IDENTIFICATION: IDENTIFY PER QSI 044 6.2
- 2) D3552-101 CLIP IS ONLY COMPATIBLE WITH D3552-1/-3/-5 DOOR PROPS
- 3) D3552-103 BALL SOCKET END IS ONLY COMPATIBLE WITH D3552-7/-9/-11/-13/-15/-17/-19/-21/-23/-25/-27/-29 DOOR PROPS

APPROVED	DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	VS		
	CHECKED	AK	DRAWING NO.	REV. L
	MFG. APPR.	DD	D3552	SHEET 2 OF 2
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	DOOR PROP	NTS
DATE		15.04.13	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. IT IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



LS Technologies Inc

314 Jessop Ave

Saskatoon, SK, S7N 1Y6

Ph: (306) 683-5000 Fax: (306) 683-6403

Certificate of Conformance

Jan 30, 2017

This is to certify that the parts listed below meets specifications as required by your order.

10 Units : D3969-3 B155911 Stainless Gas Spring

8 Units : D3552-23 B155820 Gas Spring

12 Units : D2807-041 B156054 Stainless Gas Spring

Country of Manufacture : Canada

Date of Manufacture : Jan 2017

This product is ROHS compliant.

Purchase Order # 35077

Inv# 16014

L S Technologies Inc Canada

A handwritten signature in blue ink, appearing to be 'Nolan Fehr', written over a horizontal line.

**Nolan Fehr
President**



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO35077**

Purchase Order Date 1/25/2017

PO Print Date 1/25/2017

Page Number 1 of 2

Order From :

VC-LST0001

Ship To : DART AEROSPACE LTD

LS TECHNOLOGIES INC.
314 JESSOP AVE
SASKATOON, SK S7N 1Y6
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

JAN 25 2017

Contact Name

Vendor Phone

306 683 5000

Ship To Contact

Ship To Phone

Ship Via:

FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

EXW - (Ex Works)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	SSA4/8-122-310-360N AS PER D3969 REV. D B155911	Gas Spring	1/31/2017 Yes 1/31/2017		10.00 Each	\$65.00	\$650.00
						Line Total:	\$650.00
2	B6-190-475-070N AS PER DWG D3552 REV. L B155820	Door Prop	1/31/2017 Yes 1/31/2017		8.00 Each	\$32.50	\$260.00
						Line Total:	\$260.00
4	6/15-164/50-115N AS PER DWG D2807 REV. E B156054	Gas Spring	1/31/2017 Yes 1/31/2017		12.00 Each	\$63.90	\$766.80

PO Instructions: Fedex Acc#151793240

Note:

1/25/2017

LS Technologies Inc
314 Jessop Ave
Saskatoon, SK S7N 1Y6

Ph: 306-683-5000 Fax: 306-683-6403

Packing Slip

P.O. No.	Date	Invoice #
35077	1/30/2017	16014

Bill to:

Dart Aerospace Ltd
1270 Aberdeen St.
Hawkesbury, ON K6A 1K7

Ship to:

Main Finished Goods Location
Dart Aerospace Ltd
1270 Aberdeen St.
Hawkesbury, ON K6A 1K7

Ship	Via	FOB
1/30/2017	Fed-Ex	

Qty	Description
10	D3969-3 B155911 Stainless Gas Spring (SSA4/8-122-310-360N)
8	D3552-23 B155820 Gas Spring (B6-190-475-070N)
12	D2807-041 B156054 Stainless Gas Spring (6/15-164/50-115N)
Shipping Via FED EX Tracking # 778307449273	

FEB 01 2017

DAS
6
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DAS
38
9-89

Order checked by :